

ABSTRACT OF THE DISCLOSURE

The present invention provides a single chain antibody that retains its original specific binding activity with an antigen, and a labeled single chain antibody in which a labeling substance is bound to the single chain antibody. Specifically, the labeled single chain antibody of the present invention can be produced by linking a labeling substance to a linker part of a single chain antibody. The antibody is produced using a wheat embryo-derived cell-free protein synthesis system, and production is carried out in a low reductive state that allows an intramolecular disulfide bond to be retained. Further, bonding the antibody to a solid phase via the labeling substance enables production of an immobilized single chain antibody as well as a method for analyzing an antigen-antibody reaction using the immobilized single chain antibody.